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Low Costs Of Defensive Medicine, Small Savings From Tort Reform

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ABSTRACT **In this paper we present the costs of defensive medicine in thirty-five clinical specialties to determine whether malpractice liability reforms would greatly reduce health care costs. Defensive medicine includes tests and procedures ordered by physicians principally to reduce perceived threats of medical malpractice liability. The practice is commonly assumed to increase health care costs. The results of studies of the costs of defensive medicine have been inconsistent. We found that estimated savings resulting from a 10 percent decline in medical malpractice premiums would be less than 1 percent of total medical care costs in every specialty. These savings are lower than most previous estimates, and they suggest that the presumed impact of tort reform on health care costs may be overstated.**

Because medical malpractice insurance premiums account for less than 2 percent of total estimated national health spending,[1] some observers assert that tort reform would do little to help control rising health care costs. However, others point out that physicians' efforts to avoid malpractice litigation—by ordering marginally useful tests, performing marginally useful procedures, and prescribing marginally useful medications—can add billions of dollars to our national healthcare bill.

Background On Defensive Medicine

Defensive medicine is generally agreed to exist, but the extent and the costs involved have been the subject of much debate. A distinction is sometimes made between "positive" defensive medicine—extra tests or procedures performed primarily to reduce malpractice liability—and "negative" defensive medicine, by which physicians avoid treating high-risk patients, performing high-risk procedures, or practicing in certain geographic areas because of fear of potential malpractice litigation.[2–4] In this paper our focus is on positive defensive medicine.

Direct surveys of physicians during the past thirty years have yielded estimates ranging from 21 percent to 98 percent of responding physicians admitting to defensive medicine practices.[3,5–7] The wide range of estimates is due to several factors, including differences among specialties and variations in survey question wording. However, findings from empirical studies using data sources, such as Medicare payments or health claims, that describe costs and services that were actually used in patient care suggest that defensive medicine behavior may be less prevalent than reported in direct surveys of physicians.

FEAR OF LITIGATION Some studies have reported strong relationships between physicians' fear of malpractice litigation and behavior that may reduce litigation risks, such as the use of caesarean section instead of vaginal birth.[8–13] Other studies have found such relationships to be complex, weak, or nonexistent.[14–17]

EFFECTS ON HEALTH CARE COSTS Studies that examine the effects of defensive medicine on health care costs have produced similarly conflicting findings. Several studies have found

lower health care costs in states that have enacted direct reforms, such as limits on awards for noneconomic damages, compared to states that have no such reforms.[18–20] Other studies have found weak relationships, or no relationships at all, between either malpractice premiums and health care costs or direct reforms and health care costs.[16,17,21,22]

Nearly all of the studies cited above focused on limited sets of clinical conditions or clinical specialties, or both. However, a few recent studies have used data supporting more comprehensive estimates of defensive medicine costs, and these suggest that reforms aimed at limiting damage awards are likely to lead to only modest cost savings.[20–23]

Based on these more recent studies, the Congressional Budget Office now estimates that decreased use of health care services associated with specific tort reforms could reduce national medical spending by 0.3 percent.[24] A more detailed review of the research cited above is available in the online Technical Appendix.[25]

In the study reported here, we used a recently developed analytic methodology—called episode definition—and a national health care claims database that together enabled us to develop a more precise estimate of defensive medicine costs than previously available. Further, we developed separate estimates for all clinical conditions and across a wide range of physician specialties.

Study Data And Methods

Our analytic approach was similar to that of several previously reported empirical studies of defensive medicine[9,10,16,17,22] in that we quantified relationships between a "tort signal," used as a measure of physicians' perceived liability risk, and medical care costs. With those relationships specified, we determined how costs would change in response to developments such as tort law reforms that might affect physicians' perceptions of malpractice liability risks.

We drew on two primary sources of data for the study. We measured health care costs using a database of more than 400 million paid medical and pharmaceutical claims from CIGNA HealthCare for the two-year period July 1, 2004, through June 30, 2006. As the tort signal, we used data on physicians' medical malpractice insurance premiums.

We first describe the construction of our health care cost and medical malpractice insurance premium variables. Next, we indicate how costs were attributed to individual physicians and how the physicians' medical malpractice insurance premiums were determined. Finally, we describe the analytic approach with which relationships between costs and insurance premiums were specified.

COSTS AND PREMIUMS Claims from the CIGNA database were grouped into episodes of care using Ingenix's Episode Treatment Group (ETG) software, Version 6.0.[26] If, for example, claims show a member as having a diagnosis of acute sinusitis, the software would link the claim for the physician office visit at which the symptoms were diagnosed and any related claims such as laboratory tests, imaging, or prescribed medications.

Costs on individual claims were standardized to remove variability related to provider pricing. Methods used for cost standardization are described in the Technical Appendix.[25] Episode total costs in our calculations reflect these standardizations. Differences in costs between groups of episodes indicate differences in quantity and mix of services and resources used, not price differences. Because inpatient claims are inclusive of all services provided during inpatient stays, it was not possible with these claims data to distinguish care management differences such as the use of intensive care units.

Physicians' medical malpractice premiums were determined using data from state insurance department rate filings submitted by insurers. Medical malpractice, like all other forms of insurance, is regulated in every state by the department of insurance. Insurer rate filings are considered public data in all states, accessible through open records or freedom-of-information requests. We obtained medical malpractice rate filings from companies with large market share in thirty states, where more than 70 percent of CIGNA members live.

Medical malpractice premiums differ by clinical risk category, which is a function of specialty and surgery and obstetrics procedures performed; the amount of insurance coverage being purchased; and the number of years of risk exposure being insured. First-year physicians always have the lowest premiums, and physicians who have been with a company for five or more years, called mature physicians, always have the highest premium rate.

We standardized the tort signal that might be associated with different levels of malpractice insurance coverage across physicians by using premiums for mature physicians with policies that insurers describe as "$1 million/$3 million coverage," meaning that physicians are insured up to $1 million for each separate incident and a total of $3 million per year. This allowed us to eliminate variability in the tort signal.

Using data on insurer market share from the National Association of Insurance Commissioners, we calculated the average medical mal-